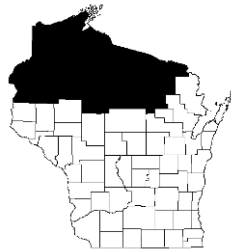




Northern Region Forest Insect & Disease Report

*Wisconsin Department of Natural Resources
Division of Forestry*

CONTENTS



Spring Forest Health News in Northern Region

- [Salvaging Storm Damage](#)
- [Spruce Budworms](#)
- [Spring Defoliators Right Around the Corner](#)
- [Relative Risk of Overland Oak Wilt Spread Late Summer to Fall](#)
- [WI DATCP EAB Purple Panel Trapping Plan](#)
- [Gypsy Moth Quarantine Extended to Price and Jackson Counties On May 1](#)

Odds & Ends

- [Hemlock Woolly Adelgid Found in Michigan](#)
- [The Sterile Conk—No Longer Sterile \(officially\)!](#)
- [Asymptomatic Infection by *Diplodia pinea* in State Nurseries—2010](#)
- [Website for Reporting Potentially Resistant Elms](#)
- [Forest Health in Other Parts of the Wisconsin](#)
- [Noteworthy Forest Health Links](#)
- [Forest Health Websites & Phone Numbers](#)

Forest Insect & Disease Contacts

Spring Forest Health News in Northern Region

Salvaging Storm Damage

- Maximizing product value: If possible, prioritize cleaning up pine logs first. Attempt to get them to the mill within 30 days of April storm damage to minimize blue stain.
- Protecting standing trees: If possible, prioritize cleaning up pine and hemlock logs to avoid pine engraver and hemlock borer attack on standing trees. If there is a drought, I suspect getting rid of pine logs by mid-June would minimize pine engraver attack on standing pines as much as is possible.



Figure 1. Left: Leaving freshly cut pine or windblown pine next to standing pine can promote pine engraver attack on the standing pine during droughts.

Right: Hemlock borer populations increase after blowdowns and historically have caused problems for standing hemlocks in northern Wisconsin after major wind damage.

Spruce Budworms

Defoliation of balsam firs and white spruces by the Spruce Budworm appears to be on the rise in northern Wisconsin and the U.P. of Michigan. Some fir and spruce have been hammered in recent years in northern and central

(Continued on page 3)

(Continued from page 2)

Florence Co., northern Forest Co., and northeastern Oneida Co. Spruce budworm caused noticeable defoliation in all U.P. counties bordering Wisconsin in 2010.

The last big outbreak in northeastern Wisconsin lasted 10 years (you read correct—10 years—not a typo) during the 70s. Hundreds of thousands of acres of spruce-fir were defoliated then. In some locations, 30 – 50% of spruce-fir, mostly 44 – 55 years old, died after 4 years of heavy defoliation. In contrast, only 7% died after 4 years of moderate defoliation. Look for damage to show up in 2011 in mid-July, and if you see any, please let me know about it. Infested trees will look red-brown. In the meantime, it wouldn't hurt to consider setting up any over-mature spruce-fir stands for regeneration harvests.



Figure 2. Typical spruce budworm defoliation. Look for it in northeastern Wisconsin in 2011.

Spring Defoliators Right Around the Corner



Figure 3. Forest Tent Caterpillars emerging from their eggs. We might see some Forest Tent Caterpillar defoliation in Douglas and Bayfield counties in 2011. (photo by G. J. Lenhard, Louisiana State Univ, Bugwood.org)

I received a couple reports this winter of 2010 forest tent caterpillar defoliation in Bayfield County and near Lake Nebagamon in Douglas County. I also received some reports of gypsy moth egg masses in Bayfield County and some in Vilas County. These critters will hatch out of their eggs soon. You probably would notice defoliation in late May or early June. Let me know if you see any defoliation.

Relative Risk of Overland Oak Wilt Spread Late Summer to Fall

Kyoko Scanlon finished up a noteworthy field study in 2010. It is written up in the 2010 Forest Health [Annual Report](#) (starting on page 33). She attempted to determine the relative risk of overland oak wilt spread from thinning in oak stands from mid-July to mid-October. Her study results corroborate the notion that risk during that time is small.

WI DATCP EAB Purple Panel Trapping Plan

By Mark Guthmiller

DATCP is planning to set up approximately 6,000 EAB traps this year. About 2,000 will be on a grid in northwest and southwest Wisconsin, while the rest will be risk-based and placed at campgrounds, wood-utilizing businesses, etc. Traps are not being placed in counties where EAB has already been detected. Traps can be purchased from two manufacturers; contact Bill McNee for details (bill.mcnee@wisconsin.gov).

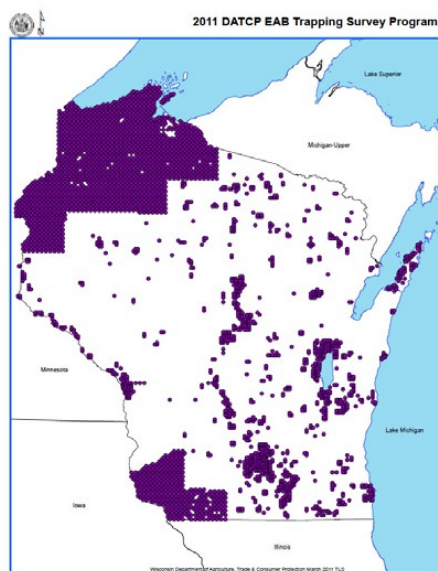


Figure 4. 2011 Wisconsin DATCP EAB Trapping Plan.

Gypsy Moth Quarantine Extended to Price and Jackson Counties On May 1

The red counties on the map (next page, top right) are the counties quarantined for gypsy moth. Quarantine details and official contacts can be seen at http://datcp.wi.gov/Environment/Gypsy_Moth/Quarantine_Regulations/. Basically,

(Continued on page 5)

(Continued from page 4)

loggers need an Accurate Statement attached to shipping documents accompanying log loads shipped out of quarantine. Receiving mills in non-quarantined areas need a compliance agreement, as does the shipper. If you have questions, don't take my unofficial word for it. Contact Bob Dahl at DATCP (608-224-4573) for questions dealing with wood movement within Wisconsin and JoAnn Cruise with APHIS (608-231-9545) for questions dealing with wood movement out of Wisconsin.

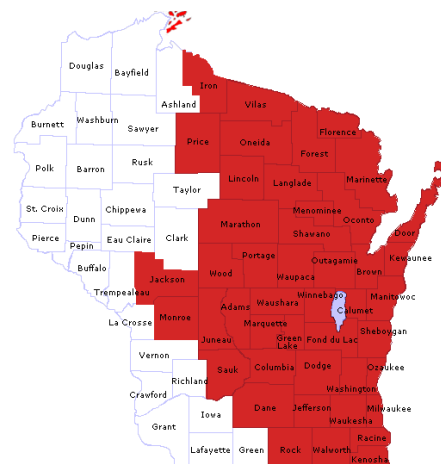


Figure 5. Red counties are under the gypsy moth quarantine in 2011.

Odds & Ends

Hemlock Woolly Adelgids Found in Michigan

Surveyors in Michigan found hemlock woolly adelgids (HWA) on ornamental trees in three Michigan counties in 2010—Ottawa, Emmet, and Macomb. We would be better off without this white fluffy critter, so please keep your eyes out for



Figure 6. Hemlock Woolly Adelgid is found on the undersides of infested hemlock branches. It has not been found in Wisconsin. (photo by Cieala, Forest Health Management International, Budgwood.org)

(Continued on page 6)

(Continued from page 5)

it. Cold temperatures present in much of northern Wisconsin *currently* make the likelihood of severe damage low by the HWA strain *currently* present in the USA.

The Sterile Conk—No Longer Sterile (officially)!

(**Warning:** Only for you pathology geeks. By reading the following paragraph, you hereby agree to not make fun out of any member of the Forest Health Staff for taking an interest in the intricacies of fungal taxonomy)

Most of you are familiar with the canker rotting fungus called the sterile conk, found on birch. It's called the sterile conk because no one ever *apparently* saw it produce any sexual fruiting bodies in nature (note the “apparently”). The black mass is just a bunch of fungal hyphae. I recently saw a research abstract (published in 2010) that made me chuckle for two reasons. They reported the sexual fruiting body (basidiocarp) of the sterile conk for the “first” time on a living birch. So, the sterile conk is no longer sterile, officially. Though you may not find this truly hilarious, I do. Also hilarious: there are pictures of the basidiocarps in a reference that many of you have in your offices (Sinclair & Lyon, 2005). I suppose the discoverers of this disease should have just called it That Nasty Black Growth on Birch Disease:

<http://onlinelibrary.wiley.com/doi/10.1111/j.1439-0329.2010.00687.x/abstract>



Figure 7. A sterile conk on paper birch. If you see this on paper birch, you know it's going to fall down soon. (photo by L. Haugen, USFS, Bugwood.org)

Asymptomatic Infection by *Diplodia pinea* in State Nurseries—2010

— adapted from K. Peterson and K. Scanlon, DNR 2010 Forest Health Annual Report

Over the last five years, state nurseries have implemented an aggressive management plan to monitor and control *Diplodia* shoot blight and canker on red pines. Some evidence suggests the presence of this fungus, coupled with increased seedling stress, could lead to seedling mortality. Recent research revealed that the fungus could persist in or on seedlings without showing symptoms and become active once a tree is stressed, primarily from moisture deficit. For management purposes, an upper threshold infection tolerance of 10 % has been established. The

(Continued on page 7)

(Continued from page 6)

overall asymptomatic infection rate, tested by Forest Health Protection since 2006, has been consistently lower than the 10% threshold level since 2007.

Nursery	Number of seedlings tested 2010	Total positive for Diplodia 2010	% positive for Diplodia 2010	% positive for Diplodia 2009
Hayward	198	6	3.03%	1.77%
Griffith	260	10	3.85%	4.68%
Wilson	89	0	0%	1.90%

Table 1. Results from the 2010 Diplodia screening of red pine stock from Wisconsin's state nurseries.

Website for Reporting Potentially Resistant Elms

The mighty American elm was not totally defeated by Dutch elm disease. Surviving, resistant elms have merely hunkered down, hiding below the sweep of the ever-present Dutch elm disease radar. Presumably, they are carrying on with their lives, making babies, and formulating a way to take over a good part of the forest again. Know of any of these stalwart trees? Go to http://nrs.fs.fed.us/disturbance/invasive_species/ded/survivor_elms/ to learn how you can help the elms.

Forest Health in Other Parts of the Wisconsin

- Current Beech Scale distribution— Eastern Wisconsin:
http://dnr.wi.gov/forestry/fh/pdf/BBD_Distribution.pdf
- DNR Suppression Spray Program—about 3000 acres will be sprayed during late-May to early June in parts of Marinette, Menominee, Shawano, Brown, Sauk, Dane, Rock and Milwaukee counties
- DATCPs Slow the Spread Program—about 250,000 acres will be sprayed in the western half of Wisconsin
- Cynipid wasp/woodpecker damage on bur-swamp white oak hybrids—NER
- Abundant reports of squirrel damage on trees—NER and NOR

Noteworthy Forest Health Links

- 2010 WI DNR Forest Health [Annual Report](#)
- 2010 MI Forest Health [Annual Report](#)
- [Summary](#) of SLAM project in MI (an attempt at slowing ash mortality)
- [Mountain Pine Beetle in Jack Pine](#) in western Canada

(Continued on page 8)

(Continued from page 7)

- Potentially blight [resistant chestnuts](#) becoming available
- Parasitic Wasp [Control](#) of EAB video (fast forward to 3:52)
- New [EAB surveying method](#) for urban areas
- [Environmental effects](#) of EAB-targeted systemic insecticides
- North American [ash tolerance](#) to EAB (abstract)
- [Effects](#) of EAB in forests (abstract)
- Ash regeneration in southeastern Michigan (copy & paste link):
http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6T6X-51J7CGJ-2&_user=10&_coverDate=02%2F01%2F2011&_rdoc=1&_fmt=high&_orig=search&_origin=search&_sort=d&_docanchor=&view=c&_acct=C000050221&_version=1&_urlVersion=0&_userid=10&md5=cee69473cbef954bae628c4b2bc3c2e7&searchtype=a#aff0005
- [Maggot Art](#)
- Forest Pest [Rap](#)

Forest Health Websites and Phone Numbers

- EAB Reporting:
 - (1) 1-800-462-2803
 - (2) email DATCPEmeraldAshBorer@wisconsin.gov
 - (3) online at <http://emeraldashborer.wi.gov> (click on **Report EAB** on the top menu)
- EAB Information: <http://emeraldashborer.wi.gov>
- Gypsy Moth Reporting:
 - (1) 1-800-642-MOTH
 - (2) email DNRFRGypsymoth@wisconsin.gov
- Gypsy Moth Information: <http://gypsymoth.wi.gov/>
- Forest Health Issues: <http://dnr.wi.gov/forestry/Fh/>
- Sick Tree Diagnostic Keys:
 - <http://www.extension.umn.edu/gardeninfo/diagnostics/index.html>
 - <http://greenindustry.uwex.edu/diagnostics/index.cfm>
 - <http://imfc.cfl.scf.rncan.gc.ca/accueil-home-eng.html> (this is very useful!)
- Forest Insect and Disease Handouts for Landowners:
 - <http://council.wisconsinforestry.org/invasives/pdf/Appendix-G.pdf>
- Oak Wilt: <http://dnr.wi.gov/forestry/Fh/oakWilt/>
- Annosum Root Rot: <http://dnr.wi.gov/forestry/Fh/annosum/>
- Firewood movement in Wisconsin:
 - https://onlineservices.datcp.wi.gov/eab/articleassets/EAB_GM_Firewood_Restrictions.pdf

Acknowledgements

Thanks to Jane Cummings Carlson, Tom Boos, Colleen Robinson Klug, and Bill McNee for various links in Noteworthy Forest Health Links. Thanks to Mark Guthmiller, Kyoko Scanlon, Kristin Peterson, and Linda Williams for articles and information in their newsletters.

FOREST INSECT & DISEASE CONTACTS

May 2011 – July 2011

Brian Schwingle

Forest Health Specialist

107 Sutliff Ave

Rhineland, WI 54501

715-365-8908

brian.schwingle@wisconsin.gov

Shane Weber

Forest Health Specialist

810 W. Maple St.

Spooner, WI 54801

715-635-4156

shane.weber@wisconsin.gov

Florence, Forest, Iron, Langlade,
Lincoln, Oneida, Price, Taylor, &
Vilas counties

Ashland, Barron, Bayfield, Burnett,
Douglas, Polk, Rusk, Sawyer, &
Washburn counties



Northern Region Forest Insect & Disease Report produced by

Brian Schwingle

Forest Health Specialist

Wisconsin Department of Natural Resources

715-365-8908

brian.schwingle@wisconsin.gov

Note: This pest report is an informal newsletter and covers forest health issues in the northern 18 counties of Wisconsin. The purpose of this newsletter is to provide forest owners and managers in the Northern Region with regional up-to-date forest health information. We welcome your comments/suggestions on this newsletter *and your reports on forest health problems you observe in your area*. If you would like to subscribe to this newsletter, please contact Brian Schwingle at brian.schwingle@wisconsin.gov. Previous issues of this newsletter and regional forest health updates from other Wisconsin regions are available at <http://dnr.wi.gov/forestry/FH/intheNews/>.